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REMARKS

Claims 1 - 24 are pending in the present application. Claims 17 - 24 have been withdrawn as being directed to non-elected inventions, Claims 1 - 10 and 14 have been cancelled, Claim 11 has been amended, and Claims 25 - 29 have been added, leaving Claims 11 - 13, 15, 16, and 25 - 28 for consideration after entering the present amendment. Claim 11 has been amended for clarity and not to overcome prior art. Claims 25 - 31 have been added to further claim the present invention. Support for new Claims 25 - 28 can at least be found on page 10, line 15 through page 11, line 10. Support for new Claim 29 can at least be found in original Claim 14 as well as on page 8, lines 12 - 15. Support for new Claims 30 and 31 can at least be found in originally filed Claims 12 and 13. This amendment does not narrow the scope of Claim 11. No new matter has been added by the amendment.

Restriction pursuant to 35 U.S.C. §121

The Examiner requires restriction pursuant to 35 U.S.C. §121 between Groups I, II, and III. Group I, Claims 1 - 10, are directed to low birefringence and low stress transparent or translucent thermoplastic film, classified in Class 428, subclass 220; Group II, Claims 11 - 16, are drawn to a continuous film extrusion process, classified in Class 264, subclass 210.2; and Group III, Claims 17 - 24 are drawn to a finishing roll, classified in Class 425, subclass 325. Applicants hereby confirm the election of Mr. Robert Walter, electing Group II, Claims 11 - 16. Applicants reserve their rights with respect to Groups I and III, Claims 1 - 10 and 17 - 24, including the right to file divisional application(s) thereon.

Specification

The Abstract has been objected because it is in the form of two paragraphs. The Abstract has been amended to be one paragraph.

The Title has been objected to as not descriptive. The Title has been amended commensurate with Claims 11 and 29.

35 U.S.C. §112 first and second paragraph

Claim 14 has been rejected under 35 U.S.C. §112, first and second paragraphs, as allegedly containing subject matter which was not described in the specification in such a way as

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to enable one skilled in the art to make and/or use the invention, and as allegedly indefinite. Claim 14 has been cancelled, and Claim 29 has been added. It is noted that birefringence is proportional to dimensional stability. By measuring thermal shrinkage of the opaque film, the dimensional stability is determined. Birefringence does correlate to dimensional stability and therefore, Claim 14 would be understood to one of ordinary skill in the art.

35 U.S.C. §103

Claims 1 – 16 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 3,756,760 to McBride in view of U.S. Patent No. 5,240,666 to Schnyder et al., U.S. Patent No. 5,286,436 to Funk et al., and alleged admitted prior art ("Alleged Admission").

The present application teaches and claims: A continuous film extrusion process for producing a transparent or translucent thermoplastic film for optical media applications having a low birefringence, low stress and wherein at least one surface of the film has a roughness of less than about 4 microinches and a retardation value of less than about 100 nanometers, which process comprises: extruding a molten thermoplastic film and passing the molten thermoplastic film through an opening between two opposing calendering rolls. At least one calendering roll is a finishing roll and subsequently cooling the hot thermoplastic film to a temperature below its solidification temperature of the thermoplastic film. The finishing roll is a multi component structure comprised of an inner steel shell, an intermediate resilient covering over the inner steel, and a metal layer metal sleeve outer covering comprised of at least two layers.

McBride is directed to a finishing roll for extruded plastic. McBride teaches the use of a single metal outer sleeve of nickel over a rubber covered roller. As admitted in the Office Action, McBride at least fails to teach:

- a. the outer shell formed of two layers,
- b. using the process to produce transparent or translucent films,
- c. using the process to produce films having a retardation value of less than about 100 nm,
- d. an inner core of steel, and
- e. the claimed roughness.

In order to cure the deficiencies of McBride, Schnyder et al., Funk et al., and Alleged Admissions are relied upon. Schnyder et al., which is directed to an apparatus and method for

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producing plastic films, teaches a plastic foil producing apparatus where a plastic mass is cooled in a roll nip. The roll comprises a rotatable roller shell supported at the non-rotatable support member. (Abstract) The roller has a rubber core with a metallic layer.

Funk et al. is directed to producing solid plastic sheets and films having thicknesses of less than 1 mm and having a birefringence of less than or equal to 50 nm. (Col. 3, lines 64 -- 69) Funk et al. teach controlling of the temperature of various rolls, etc. in order to attain the desired quality. (Col. 6, lines 4 -- 16) Funk fails to teach interior roll design.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). In other words, it is not what an artisan could do, but what an artisan *would* have an *incentive* to do.

In order to allegedly render the present claims obvious, various teachings have been picked out of prior art references, and assumptions regarding results have been made to allege that an artisan could make the present invention from these teachings. It is important, however, to determine what an artisan would do and whether they would have an expectation of success. As is taught in the present application, not all rolls produce low birefringence and/or low stress. The roll design affects the resulting material. As is explained in Example 1, page 14, with the present process, a film was produced having 0.010 thickness with an average retardation value of 14 nm. In contrast, typical commercial, 0.010 inch thick, polished polycarbonate produced by conventional calendaring processing has a retardation of 325 -- 500 nm. Different processes produce different results.

Applicants teach and claim a particular process that results in a low birefringence and/or low stress film. This process employs a particular finishing roll having a multicomponent structure comprising an inner steel shell, an intermediate resilient covering over the inner steel and a metal layer metal sleeve outer covering comprised of at least two layers.

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As is admitted in the Office Action, McBride fails to teach or suggest many aspects of the present claims, including the outer covering comprised of at least two layers. In order to rectify this deficiency, it is alleged that an artisan could combine McBride with the multiple layers of Schnyder et al. However, an artisan would not have an incentive or expectation of success, and still would fail to attain the present claims. Schnyder et al. has 3 components, an inner rubber core, with two layers on the core. There is no motivation to eliminate the rubber core of Schnyder et al. to replace it with the metal core of McBride, to then ignore the outer layer of McBride to use the layers of Schnyder et al. They both have distinct, different roller designs, and there is no motivation or incentive to pick parts of these designs to attain the present claims.

Additionally, the present claims are directed to attaining low birefringence and/or low stress. There is no teaching or discussion of birefringence in either of these references and hence, no expectation of success that these references would produce a low birefringence film.

Funk et al. are then relied upon to teaching roughness and birefringence. However, Funk et al. fail to teach or discuss their roll design besides its temperature features. Whether or not Funk et al. can, does, or does not attain a particular film property is on teaching, suggestion, or evidence that McBride can attain such a property. Funk et al. fail to remedy any of the problems with McBride and Schnyder et al. Funk does not teach roll design and there is no reason to believe that any teaching of Funk et al. translates to the rolls taught in McBride. There must be a teaching, motivation, or incentive in the references to make the proposed modification. The test is not what an artisan could do, but what they would do. An artisan would not combine these references in an attempt to product a low birefringence and/or low stress film.

With respect to the Alleged Admissions, the citation to page 10, lines 10 – 12 is unclear. However, even if there is a statement that a "low stress opaque film is greatly desired in various industries". This is not an admission that any of the industries have successfully developed rollers or a process to attain the desired result. A desire to produce smooth films is not equivalent to an ability to produce smooth films. The Examiner has failed to establish a *prima facie* case of obviousness. The references of record, alone and in combination, fail to render the present claims obvious. Reconsideration and withdrawal of the rejection are respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly,

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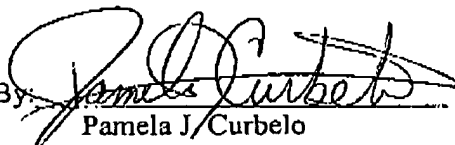
reconsideration and withdrawal of the objections and rejections, and allowance of the case are requested.

The Examiner is invited to call Applicants' Attorney to facilitate allowance of the present application.

If there are any charges with respect to this Amendment, or otherwise, please charge them to Deposit Account No. 07-0862.

Respectfully submitted,

CANTOR COLBURN LLP

By: 
Pamela J. Curbelo
Registration No. 34,676
Customer No. 23413

Date: December 29, 2003
Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929